

4.11 AESTHETICS

This section identifies potential impacts on the visual character of Ames Research Center, and on views within and through the Center from each of the five alternatives. It also proposes mitigation measures to reduce or eliminate identified impacts.

A. Standards of Significance

An alternative for the NASA Ames Development Plan (NADP) would have a significant impact with regard to aesthetics if it would:

- Substantially degrade the visual character or quality of ARC or its surroundings.
- Substantially obstruct significant public views or view corridors.
- Provide an unharmonious contrast with the visual character of surrounding areas.
- Require the removal of any protected trees as defined in Santa Clara County Ordinance No. NS-1203.107, §1, 2-11-97.

B. Impact Discussion

This section discusses the potential aesthetic impacts of each of the five proposed alternatives. As described in Section 3.11, Ames Research Center and its surrounding lands have a number of distinct visual units, each with its own character, landscaping, and typical uses. The analysis that follows describes potential impacts on those visual units under each of the five alternatives.

None of the new buildings have been designed yet, so it is not possible to describe their visual impacts with any certainty. However, rough setback, height and FAR information is available for each of the alternatives, so it is possible to predict building massing and thus to assess new buildings' potential to obstruct key views and view corridors, and to create too sharp a contrast between ARC and the areas that surround it.

The final part of this section describes potential impacts on protected trees.

1. Alternative 1: No Project

Under Alternative 1, there would be little to no effect on the aesthetic quality of any of the visual units within Ames Research Center. No new buildings would be constructed, and none of the existing buildings would be demolished except as established in the baseline. There would be no impacts on public views or view corridors. No new contrasts with surrounding areas would be created as viewed from outside the Center.

2. Alternative 2

As explained in Chapter 2, Alternative 2 proposes to place new development in the NRP, Bay View, and Eastside/Airfield areas, including the renovation of Hangars 2 and 3.

a. Visual Unit 1: Western End of Shenandoah Plaza

The only change in this visual unit would be the addition of a small, two-story structure in the south west corner. The historic character of Shenandoah Plaza would remain, and be protected by design guidelines for rehabilitation of existing buildings. New development in adjacent areas would be limited to no more than 12 meters (40 feet) in height, which would be compatible with existing structures. Thus there would be no significant impact on aesthetics in this visual unit under Alternative 2.

b. Visual Unit 2: Eastern End of Shenandoah Plaza

The visual character of this unit would change dramatically under Alternative 2. All of the existing non-historic buildings would be removed, and a approximately 32,000 square meters (345,000 square feet) of new development would be added between McCord and Severyns Avenues. The strip of land between Severyns Avenue and Cummins Road would be returned to greenspace, as under the original plan for Moffett Field.

New development would generally be under 12 meters (40 feet) in height in this visual unit, with a few taller buildings on the fringes of the Shenandoah

Plaza Historic District at the corner of Wescoat and Severyns, and at the corner of Bushnell and McCord. Building heights would be low enough to protect the view corridor down the central green of Shenandoah Plaza to Hangar 1. New design guidelines that would be adopted under any of the alternatives state that buildings within the Shenandoah Plaza Historic District would be designed in light, neutral colors with a palette of materials, massing, and fenestration compatible with the historic buildings. Setbacks in this visual unit would be small, with most buildings built up to the sidewalk edge to create a strong streetwall. This would give Visual Unit 2 a scale distinctly different from, but still compatible with, the intact sections of the Shenandoah Plaza Historic District to the west. Thus, there would be no significant visual impacts from development under Alternative 2.

c. Visual Unit 3: Southeastern Perimeter of the NRP Area

The visual character of this currently undeveloped strip of land along the southern and eastern perimeter of the NRP area would change substantially under Alternative 2. Currently undeveloped land just south of Hangar 1 would be developed with buildings up to 20 meters (65 feet) in height, with medium setbacks, opening up the view down Cody Road towards Hangar 1. This would block the existing panoramic views across the airfield. However, wide pedestrian and bicycle routes extending east/west across the NRP area would still provide view corridors to the airfield. In addition, the creation of a 9-hectare (22-acre) burrowing owl preserve immediately opposite Ellis Street would preserve a sweeping view of the airfield and historic hangars as part of the entrance experience to Ames Research Center. Thus while there would be substantial change in this visual unit, there would be no significant negative impacts on its visual character.

d. Visual Units 4 and 5: The Barracks and the Exchange Area

All of the existing structures in the Barracks and Exchange areas would be demolished. This visual unit would become the heart of the University district in the NRP area, with a perimeter of two- to four-story buildings surrounding large central open spaces. As described above, regularly-spaced bicycle and pedestrian corridors would provide view corridors across the NRP area. The

new design guidelines would ensure the quality and compatibility of new structures, which would be predominantly stone, concrete or masonry with no more than 30 per cent glass. The design guidelines also require that exterior building facades be articulated, and that the base of all buildings be designed to provide pedestrian interest. Thus while there would be substantial changes in these visual units, there would be no significant negative impacts on their visual character.

e. Visual Unit 6: Main Entry

There would be very little change in the visual quality of this area under Alternative 2. There could be some low-density development in NRP Parcel 16, as shown in Figure 2.2, but there would be no new development along Clark Memorial Drive. Thus there would be no significant impacts on the character of this visual unit.

f. Visual Unit 7: Ames Campus Area

Alternative 2 does not propose any new development within the Ames Campus area. The only impact on this visual unit would come from changes in character to the north and west as the Bay View area was developed, which would partially block views of the wetlands in the North of Bay View area. Unless view corridors were preserved in the new street layout in the Bay View area, this could be a significant impact.

g. Visual Unit 8: Bay View and North of Bay View

The visual character of the southern portion of this visual unit (the Bay View area) would change dramatically under Alternative 2. At present, the Bay View area is an almost entirely undeveloped expanse of ruderal land with expansive views of the rest of Ames Research Center. Under Alternative 2, there would be approximately 121,000 square meters (1.3 million square feet) of new development concentrated on approximately 14 hectares (34 acres) of land in the northwest portion of the visual unit. A belt of open space, some of it formal park area and some undeveloped land, including the 11-hectare (27-acre) burrowing owl preserve, would surround the development. This open space would buffer adjacent natural resources from development, and allow clear

views north across the Eastern and Western Diked marshes in the northern portion of this visual unit to the airfield and the salt ponds. There are no design guidelines, height restrictions, or setback requirements for the Bay View area at present. Thus new development there could cause significant impacts on the visual quality of this visual unit.

h. Visual Unit 9: Storm Water Retention Ponds

There would be no development in this visual unit under Alternative 2. It would continue to allow expansive views from the North of Bay View area out to the salt ponds and the East Bay Hills.

i. Visual Unit 10: The Airfield

No changes are proposed for the airfield under Alternative 2. It would continue to provide a huge view corridor in the heart of Ames Research Center, allowing views across the Center and out to the salt ponds.

j. Visual Unit 11: CANG Area

No development is proposed in the CANG area under Alternative 2. The visual character of this area will change slowly over time as the plans cleared under the CANG EA, described in Chapter 2, are implemented. New development in the NRP area would partially block the CANG area's views of Highway 101 and Mountain View, but this is not considered a significant view, and the coastal hills would still be visible. Thus there would not be significant impacts on the visual character of this unit from development proposed under Alternative 2.

k. Visual Unit 12: Hangars 2 and 3

There would be approximately 42,000 square meters (452,000 square feet) of new development in this visual unit spread out over approximately 13 hectares (31 acres), most of it in low-density, one- to two-story buildings on the north side of the hangars. The historic hangars would be rehabilitated for use as light industrial or low-density research and development space. There would also be a new control tower constructed at the southeast corner of Hangar 2. This would increase the number of low structures around the hangars, but would

not be sufficient to change the visual character of this unit which is set by the towering forms of the hangars. There would thus be no significant impacts on this visual unity from new development proposed under Alternative 2.

l. Visual Unit 13: The Golf Course and Munitions Bunkers

Under Alternative 2, the aesthetic character of this visual unit would change somewhat. There would be approximately 9,000 square meters (98,000 square feet) of new development on a 4.0-hectare (9.8-acre) parcel currently occupied by one hole of the golf course on the east side of Macon Road. The low-density of this development would prevent it from substantially affecting views across the airfield to the western side of Ames Research Center. The northern area of Visual Unit 12 would be established as a burrowing owl preserve. The dominant visual feature in this area is the golf course, and it would be maintained in similar form. Thus there would be no significant impacts on the character of this visual unit from new development proposed under Alternative 2.

m. Visual Unit 14: Berry Court Military Housing Area

Alternative 2 does not propose any development for the Berry Court Military Housing area, which is outside the boundaries of Ames Research Center. However, new housing proposed on NRP parcel 6 could impact the character of this visual unit. Apartment-style housing in buildings up to five stories high would be built in a strip paralleling the eastern edge of the housing area, where buildings are only two-stories tall. This would be a substantial difference in height, and could significantly impact the visual quality of the Berry Court Military Housing area, which is currently dominated by trees and low buildings.

n. Visual Unit 15: The Orion Park Military Housing Area

Alternative 2 does not propose any development for the Orion Park Military Housing area, which is outside the boundaries of Ames Research Center. No new development is proposed in the Ames Campus area, which is the only part of Ames Research Center visible from Orion Park. Thus there would be no

significant impacts on the character of this visual unit from development proposed under Alternative 2.

o. Visual Unit 16: Military Office and Hotel Buildings

Alternative 2 does not propose any development for this visual unit, which is outside the boundaries of Ames Research Center. No new development is proposed in the adjacent Ames Campus area, or in the portion of the Shenandoah Plaza or Main Gate areas that are visible from this visual unit. Thus there would be no significant impacts on the character of this visual unit from development proposed under Alternative 2.

p. Visual Unit 17: Undeveloped Land to the West

This narrow strip of undeveloped land immediately west of the border of Ames Research Center would be slightly affected by new development proposed in the Bay View area under Alternative 2. If this new development were very tall, it could block views from the trail along the Stevens Creek berm across Ames Research Center for some distance. This would be considered a significant impact because it could block significant views from a public right-of-way. The remainder of this area is on the other side of the berm, and would not be visually affected by any new development proposed under Alternative 2.

q. Visual Unit 18 and 19 : Office/Industrial Park to the West and Mobile Home Park

The majority of new development proposed at Ames Research Center would not be visible from adjacent portions of either the office or mobile home area because of the perimeter vegetation and the tall berm along Stevens Creek. Depending on the height of new buildings, however, some of the new development in the Bay View area could be visible over the top of the berm. There is a remote chance that new development would block views of Hangars 2 and 3 from these two visual units, but even if this did occur, it would not be considered a significant impact because private views are not protected under NEPA (42 U.S.C. 4321 *et seq.*). However, it would be appropriate for NASA to consider views into Ames Research Center when siting new buildings and deciding on height restrictions in the Bay View area.

r. Visual Unit 20: North to the San Francisco Bay

The northern perimeter of Ames Research Center would be left undeveloped under Alternative 2. The only change would be the potential future construction of the Bay Trail on the easement NASA would grant under the baseline. Looking at Ames Research Center from this visual unit, development would be clustered in or adjacent to already built up areas, and would for the most part be low enough not to be visible from long distances. Thus no significant impact on the character of this visual unit would be created under Alternative 2.

s. Visual Unit 21: The Lockheed Martin Complex

In the Lockheed Martin complex, there are buildings quite close to the western perimeter of Ames Research Center that have sweeping views over the Center. New development proposed under Alternative 2 would not significantly impact any of the important views of the hangars, wind tunnels or the Bay from these buildings.

t. Visual Units 22 Through 25: Development Across Highway 101

Some of the taller development proposed in the NRP area under Alternative 2 would be visible from these visual units, especially the proposed cluster of 20- to 24-meter (65- to 80-foot) tall buildings around Ellis Circle and the proposed structured parking along the Highway 101 frontage. From a few points, these new buildings could partially block views of the historic hangars. The only public view that could be affected would be the view north along Whisman Street. If any of the proposed parking garages or the buildings at Ellis Circle were located on axis with Whisman Street, and they blocked views of Hangar 1, this would be a significant impact.

3. Alternative 3

Under Alternative 3, new development would be concentrated within the NRP area. In addition, Hangars 2 and 3 would be renovated.

a. Visual Units 1-6: The NRP Area

Within the NRP area, the impacts from new development under Alternative 3 would be substantially similar to those described above under Alternative 2. There would be approximately 92,900 square meters (1 million square feet) more development in the NRP area under Alternative 3, and thus a substantially higher density, along with a New Urbanist “Traditional Neighborhood Design” style. Thus there would be no significant negative impacts on the characters of any of these visual units under Alternative 3.

b. Visual Unit 7: The Ames Campus area

As under Alternative 2, there would be no new development in this visual unit, and none of the proposed development in the NRP area would impact it either. Unlike Alternative 2, there would be no new development in Bay View, so views to the north would remain unchanged. There would thus be no significant impacts on the visual character of the Ames Campus area under Alternative 3.

c. Visual Unit 8: Bay View and North of Bay View

There would be no new development in this visual unit or in areas adjacent to it under Alternative 3, so there would be no significant visual impacts.

d. Visual Unit 9: Stormwater Retention Ponds

There would be no new development in or adjacent to this visual unit under Alternative 3, so there would be no significant visual impacts on it from implementation of the NADP.

e. Visual Units 10 through 13: Eastside/Airfield

There would be no new development in these visual units or in currently undeveloped areas adjacent to them, and renovation of the hangars would not affect their outer appearance. While development in the NRP area would become denser, it would not affect the character of the Eastside/Airfield area because the airfield itself provides a large buffer zone. Thus there would be no significant impacts on this visual unit from new development proposed under Alternative 3.

f. Visual Unit 14: Berry Court Military Housing Area

As under Alternative 2, there could be a significant impact on the character of this visual unit as a result of up to five-story tall dormitories planned for NRP parcel 6. This would be a substantial difference in height from the existing two-story buildings in the housing area, and could significantly impact its visual quality, which is currently dominated by trees and low buildings.

g. Visual Units 15 and 16: Orion Park Military Housing Area and Military Offices

There would be no visual impacts on these units because none of the development proposed under Alternative 3 would be visible from them.

h. Visual Units 17 through 19: Office and Mobile Home Parks

There would be no visual impacts on these units because none of the development proposed under Alternative 3 would be visible from them.

i. Visual Units 20 and 21 : North to the San Francisco Bay, and the Lockheed Martin Complex

There would be no visual impacts on either of these units because development in the NRP under Alternative 3 would be far enough away that it would not block any significant views.

j. Visual Units 23 through 25: Across Highway 101

As under Alternative 2, some of the taller buildings in the NRP area proposed under Alternative 3 would be visible from these visual units, especially the proposed cluster of 20- to 24-meter (65- to 80-foot) tall buildings around Ellis Circle and the proposed structured parking along the Highway 101 frontage. From a few points, these new buildings could partially block views of the historic hangars. The only public view that could be affected would be the view north along Whisman Street. If any of the proposed parking garages or the buildings at Ellis Circle were located on axis with Whisman Street, and they blocked views of Hangar 1, this would be a significant impact.

4. Alternative 4

Alternative 4 proposes the development of new space in the NRP, Bay View, and Eastside/Airfield areas including the renovation of Hangars 2 and 3.

a. Visual Units 1-6: The NRP Area

Within the NRP area, the impacts from new development under Alternative 4 would be substantially similar to those described above under Alternative 2. The same design guidelines, height restrictions and setbacks would apply under both alternatives, but there would be approximately 46,000 square meters (500,000 square feet) less development under Alternative 4 than under Alternative 2, and thus a somewhat lower density and greater amount of new open space. There would be no significant impacts on the characters of any of these visual units under Alternative 4.

b. Visual Unit 7: Ames Campus Area

Alternative 4 does not propose any new development within the Ames Campus area. The only impact on this visual unit would come from changes in character to the north and west as the Bay View area was developed, which would block views of the wetlands in the North of Bay View area. Unless view corridors were preserved in the new street layout in the Bay View area, this could be a significant impact.

c. Visual Unit 8: Bay View and North of Bay View

As under Alternative 2, the visual character of the southern portion of this visual unit (the Bay View area) would change dramatically under Alternative 4. At present, the Bay View area is an almost entirely undeveloped expanse of ruderal land with expansive views of the rest of Ames Research Center. Under Alternative 4, there would be approximately 251,000 square meters (2.7 million square feet) of new development covering much of the planning area. A narrow belt of open space would buffer adjacent natural resources from development, but would not allow expansive views north across the Eastern and Western Diked marshes and the airfield. There are no design guidelines, height restrictions, or setback requirements for the Bay View area at present.

Thus new development under Alternative 4 there could cause significant impacts on the visual quality of the Bay View area.

No new development is proposed for the northern portion of this visual unit, the Eastern and Western Diked marshes, so they would continue to allow open views of the stormwater retention ponds, the airfield, and the East Bay Hills.

d. Visual Units 10 and 11: The Airfield and CANG Areas

As described above under Alternative 2, no changes are proposed for the airfield or the CANG area under Alternative 4, so there would no be significant impacts on the visual character of either of these units from development proposed under Alternative 4.

e. Visual Unit 12: Hangars 2 and 3

There would be approximately 53,000 square meters (570,000 square feet) of new development in this visual unit spread out over approximately 13 hectares (31 acres). As under Alternative 2, most of the new development would be in low-density, one- to two-story buildings on the north side of the hangars, although a new control tower would also be constructed at the southeast corner of Hangar 2. The historic hangars would be rehabilitated for use as light industrial or low-density research and development space. This would increase the number of low structures around the hangars, but would not be a sufficient to change the visual character of this unit which is set by the towering forms of the hangars. There would thus be no significant impacts on this visual unity from new development proposed under Alternative 4.

f. Visual Unit 13: The Golf Course and Munitions Bunkers

As under Alternative 2, the aesthetic character of this visual unit would change somewhat with the development of just under 9,300 square meters (100,000 square feet) of space on the east side of Macon Road. The low-density of this development would prevent it from substantially affecting views across the airfield to the western side of Ames Research Center. As under Alternative 2, the northern area of Visual Unit 13 would be established as a burrowing owl preserve. The dominant visual feature in this area is the golf course, and it

would be maintained in similar form. Thus there would be no significant impacts on the character of this visual unit from new development proposed under Alternative 4.

g. Visual Unit 14: Berry Court Military Housing Area

Alternative 4 does not propose any development for the Berry Court Military Housing area, which is outside the boundaries of Ames Research Center. However, new housing proposed on NRP parcel 6 could impact the character of this visual unit. There would be only about 25,000 square meters (265,000 square feet) of apartment-style housing under this alternative, rather than 33,000 (360,000) as under Alternatives 2 and 3. This should allow for lower buildings, although the height allowed on the parcel would still be up to 20 meters (65 feet). If four- or five-story buildings containing apartment-style housing were constructed, they would be substantially different in height from the two-story buildings in the Berry Court area. Although impacts would most likely be less than under Alternatives 2 or 3, development proposed under Alternative 4 could significantly impact the visual quality of the Berry Court Military Housing area.

h. Visual Units 15 and 16: Orion Park Military Housing Area and Military Offices

There would be no visual impacts on these units because none of the development proposed under Alternative 4 would be visible from them.

i. Visual Unit 17: Undeveloped Land to the West

The narrow strip of undeveloped land immediately west of the border of Ames Research Center could be affected by new development proposed in the Bay View area under Alternative 4. If this new development were very tall, it could block views from the Stevens Creek Trail across Ames Research Center for some distance, which would be a significant impact because the Trail is public right-of-way. The remainder of this visual unit is on the other side of the berm, and would not be visually affected by any new development proposed under Alternative 4.

j. Visual Units 18 and 19 : Office/Industrial Park to the West and Mobile Home Park

The majority of new development proposed at Ames Research Center would not be visible from adjacent portions of either the office or mobile home area because of the perimeter vegetation and the tall berm along Stevens Creek. Depending on the height of new buildings, however, some of the new development in the Bay View area could be visible over the top of the berm. There is a chance that new development would block views of Hangars 2 and 3 from these two visual units, but even if this did occur, it would not be considered a significant impact because private views are not protected under NEPA. However, it would be appropriate for NASA to consider views into Ames Research Center when siting new buildings and deciding on height restrictions in the Bay View area.

k. Visual Unit 20: North to the San Francisco Bay

The northern perimeter of Ames Research Center would be left undeveloped under Alternative 4. The only change would be the potential future construction of the Bay Trail on the easement NASA would grant under this alternative. Looking at Ames Research Center from this visual unit, development would be clustered in or adjacent to already built up areas, and would for the most part be low enough not to be visible from long distances. Thus no significant impact on the character of this visual unit would be created under Alternative 4.

l. Visual Unit 21: The Lockheed Martin Complex

In the Lockheed Martin complex, there are buildings quite close to the western perimeter of Ames Research Center that have sweeping views over the Center. New development proposed under Alternative 4 would not significantly impact any of the important views of the hangars, wind tunnels or the salt ponds from these buildings.

m. Visual Units 22 Through 25: Development Across Highway 101

Some of the taller development proposed in the NRP area under Alternative 4 would be visible from these visual units, especially the proposed cluster of 20-

to 24-meter (65- to 80-foot) tall buildings around Ellis Circle and the proposed structured parking along the Highway 101 frontage. From a few points, these new buildings could partially block views of the historic hangars. The only public view that could be affected would be the view north along Whisman Street. If any of the proposed parking garages or the buildings at Ellis Circle were located on axis with Whisman Street, and they blocked views of Hangar 1, this would be a significant impact.

5. Alternative 5

Alternative 5 proposes new development within all four of the planning areas, including the Ames Campus area.

Although development totals and densities would vary slightly from Alternative 2, Alternative 5's potential impacts would be substantially similar between these two alternatives, with the following differences:

- Visual Unit 7: Ames Campus. Under Alternative approximately 37,000 square meters (400,000 square feet) of existing development would be demolished and replaced with approximately 46,000 square meters (500,000 square feet) of new space. There are no design guidelines, height limits, or set back requirements for this new development. As a result, it could conflict with the existing austere industrial park character of the existing development. Depending on the height and placement of the new facilities, they could block existing views within the Ames Campus area. Both of these potential impacts under Alternative 5 would be considered significant.
- Visual Unit 12: Hangars 2 and 3. No new development would occur on the north side of the hangars, so the impacts described for Alternative 2 would not occur. There would be no significant impact on the character of this visual unit.
- Visual Unit 13: The Golf Course and Munitions Bunkers. There would be no new development in this area under Alternative 5. There would still be no significant impact on the character of this visual unit.

6. Protected Trees

As described in Chapter 3.11 and shown in Figures 3.11-26 through 3.11-28, there are protected trees, as defined by Santa Clara County, in the Ames Campus, NRP, and Eastside/Airfield areas. This section analyzes any potential impacts on those trees from the five proposed alternatives.

a. Alternative 1

Under Alternative 1, there would be no development beyond baseline conditions, as described in Chapter 2. There would thus be no impacts on protected trees under Alternative 1.

b. Alternative 2

Alternative 2 does not propose any new development in the Ames Campus area, so there would be no conflict with protected trees there.

In the Shenandoah Plaza Historic District, most of the infill development proposed under Alternative 2 would be located on parcels without any protected trees. The one exception would be NRP Parcel #14, where there are a number of protected trees on the eastern end of the parcel. However, it would be possible to avoid all of the existing protected trees through careful siting of the proposed development.

Within the remainder of the NRP area, it would probably not be possible to avoid conflicts with all of the existing protected trees. The main cause of this would be the reconfiguration of roadways proposed under Alternative 2. Many of the protected trees line existing streets, so it would not be possible to keep them all in place without dividing the proposed parcels into unbuildable shapes. In addition, another substantial group of protected trees grow around buildings that would be demolished under Alternative 2. It may be difficult to preserve these trees given how close they are to structures that would be removed.

In the Eastside/Airfield area, protected trees are only located within the golf course and around the southernmost part of the CANG buildings. Alternative

2 proposes development of a building on Eastside/Airfield Parcel #5, which is located on the most western hole of the golf course. This would almost certainly require the removal of a number of protected trees as they are clustered along the middle of the central axis of the parcel.

The potential loss of protected trees in the NRP and Eastside/Airfield areas under Alternative 2 would be considered a significant impact.

c. Alternative 3

Alternative 3 does not propose any redevelopment in the Ames Campus area, so there would be no conflict with protected trees there.

In the Shenandoah Plaza Historic District, most of the infill development proposed under Alternative 3 would be located on parcels without any protected trees. As under Alternative 2, the one exception would be NRP Parcel #14, but it would be possible to avoid all of the existing protected trees on the parcel through careful siting of the proposed development.

Within the remainder of the NRP area, it would not be possible under Alternative 3 to avoid conflicts with all of the existing protected trees. As described above under Alternative 2, the main cause of this is the proposed reconfiguration of roadways, many of which are lined with protected trees. In addition, protected trees immediately adjacent to buildings slated for demolition under Alternative 3 could be difficult to preserve.

In the Eastside/Airfield area, there would be no conflict with protected trees under Alternative 3.

The loss of protected trees in the NRP area under Alternative 3 would be considered a significant impact.

d. Alternative 4

Alternative 4 does not propose any redevelopment in the Ames Campus area, so there would be no conflict with protected trees there.

As under Alternatives 2 and 3, most of the infill development proposed under Alternative 4 in the Shenandoah Plaza Historic District would be located on parcels without any protected trees. The one exception would be NRP Parcel #14, but it would be possible to avoid all of the existing protected trees through careful siting of the proposed development.

Within the remainder of the NRP area, it would not be possible to avoid conflicts with all of the existing protected trees under Alternative 4. The main causes of this, described in more detail above, would be the proposed reconfiguration of roadways and demolition of buildings, many of which are lined by protected trees.

In the Eastside/Airfield area, Alternative 4, like Alternative 2, proposes development of a building on Eastside/Airfield Parcel #5, which is located on the most western hole of the golf course. This would almost certainly require the removal of a number of protected trees as they are clustered along the middle of the central axis of the parcel.

The loss of protected trees in the NRP and Eastside/Airfield areas under Alternative 4 would be considered a significant impact.

e. Alternative 5

Unlike the other four alternatives, Alternative 5 proposes the demolition of existing buildings and new construction in the Ames Campus area. The exact location of the areas proposed for redevelopment within the Ames Campus area have not been specified. However, as described in Chapter 3.11, protected trees in the Ames Campus area are mostly clustered along roads and within planting strips in parking lots, and so would not be affected by the proposed redevelopment. There are some protected trees around existing buildings, but it would be possible to avoid them through careful siting of demolition and construction activities.

As under Alternatives 2 through 4, most of the infill development proposed under Alternative 5 in the Shenandoah Plaza Historic District, would be

located on parcels without any protected trees. The one exception would be NRP Parcel #14, where there are a number of protected trees on the eastern end of the parcel. However, it would be possible to avoid all of the existing protected trees through careful siting of the proposed development.

Within the remainder of the NRP area, it would not be possible to avoid conflicts with all of the existing protected trees under Alternative 5. As described above in more detail under Alternative 2, the main causes of the removal of protected trees would be the reconfiguration of the road network and the demolition of buildings.

In the Eastside/Airfield area, there would be no conflict with existing protected trees under Alternative 5.

The loss of protected trees in the NRP area under Alternative 5 would be considered a significant impact.

7. Cumulative Impacts

The development any of the Alternatives 2 through 5 would result in a substantial change to the character of the ARC, as described above. However, since the aesthetic change would largely be an improvement, no significant cumulative adverse impacts would result from the project. There would not be a cumulative impact with respect to aesthetics when the NADP project is combined with other proposed projects in the area since the other projects are not located adjacent to the ARC, and each of those projects would be evaluated individually for compliance with the City of Sunnyvale and/or City of Mountain View design guidelines.

There could be significant cumulative visual impacts within the ARC if baseline development and the proposed project combined to remove a substantial number of protected trees in the NRP area, where baseline development is located.

C. Impacts and Mitigation Measures

This section summarizes significant impacts identified in Section B, and proposes mitigation measures for each identified impact.

Impact AES-1: The lack of design guidelines, height limits, and setback requirements for the Bay View, Ames Campus, and Eastside/Airfield areas could allow future development to create too stark a contrast in terms of height, density, or architectural style.

Applicable to: Alternatives 2, 4 and 5, and Mitigated Alternative 5

Mitigation Measure AES-1: NASA and its partners would develop design guidelines for the Bay View, Ames Campus and Eastside/Airfield areas in order to ensure that new buildings would stylistically complement the existing buildings in the Ames Campus and Eastside/Airfield. Design guidelines for the Bay View area would include setback requirements for Stevens Creek and Western Diked Marsh, and would ensure harmonious design.

Impact AES-2: The allowed four- to six-story height of proposed student apartments on NRP parcel 6 could conflict with the prevailing low heights in the adjacent Berry Court Military Housing area.

Applicable to: Alternatives 2 through 5, and Mitigated Alternative 5

Mitigation Measure AES-2: This parcel is not large enough to hold a sufficient number of housing units if allowed heights were reduced. The visual effect would be mitigated through a combination of landscaping, screening and overall design.

Impact AES-3: Proposed new parking structures along the Highway 101 frontage and new four- to five- story buildings around Ellis Circle could block views into and across Ames Research Center from areas across Highway 101 in

Mountain View, especially the existing view corridor along Whisman Street.

Applicable to: Alternatives 2 through 5, and Mitigated Alternative 5

Mitigation Measure AES-3: In order to prevent the obstruction of key views of the hangars and the wind tunnels in Ames Research Center from the areas of Mountain View and Sunnyvale across Highway 101, buildings in the NRP area would be carefully sited to preserve view corridors through the new development, especially from the Whisman Street corridor.

Impact AES-4: New development in the Bay View area could block views from the Ames Campus area into the wetlands area in North of Bay View and to the salt ponds beyond.

Applicable to: Alternatives 2, 4 and 5, and Mitigated Alternative 5

Mitigation Measure AES-4: As the site plan for new development in the Bay View area was developed, NASA and its partners would design the new street layout to preserve view corridors through the new development to the North of Bay View area and the salt ponds.

Impact AES-5: New development in the Bay View area could block views from the Stevens Creek Trail of the historic hangars and the San Francisco Bay.

Applicable to: Alternatives 2, 4 and 5, and Mitigated Alternative 5

Mitigation Measure AES-5: NASA and its partners would use site layout to preserve view corridors from the Stevens Creek Trail through new development in Bay View to the historic hangars and to the San Francisco Bay.

Impact AES-6: Proposed development within the Ames Campus area under Alternative 5, in the NRP area under Alternatives 2 through 5 and in the

Eastside/Airfield area under Alternatives 2 and 4 could require the removal of protected trees.

Applicable to: Alternatives 2 through 5, and Mitigated Alternative 5

Mitigation Measure AES-6a: Where possible, NASA and its partners would carefully site any development so as to preserve the protected trees.

Mitigation Measure AES-6b: Where it is not possible to preserve protected trees in place, NASA and its partners would develop a revegetation plan consistent with the requirements of the Santa Clara County Tree Preservation and Removal Ordinance.